

Shared Transportation Investigation Worksheet

In this investigation, you will observe both the light-duty and heavy-duty vehicles using a road in your community and record how many people are being moved by each vehicle.

- **Light-duty vehicles** typically move small numbers of people or amounts of things. Examples are cars, motorcycles, electric bicycles, electric scooters, auto-rickshaws, motorized tricycles, minivans, and smaller pickup trucks. Light-duty vehicles are some of the biggest contributors to greenhouse gases because they mostly use non-sustainable fuels such as gasoline and diesel. And many light-duty vehicles are used by only one or two people at a time, even if they have enough seats for several people.
 - **Heavy-duty vehicles** typically move large numbers of people or amounts of things. Examples are large vans, large pickup trucks, tractor-trailers, garbage trucks, cement trucks, and buses.
1. Find a safe, comfortable, accessible place where team members can stay in one place and observe vehicles that are using one section of road. Choose a place and time that allows you to observe plenty of vehicle traffic. Make sure you are not too close to the road or distracting drivers as you do your investigation. You could also do this investigation by recording vehicle traffic with a video camera that you leave in one place. You could also use an online traffic camera recording of a local road or highway, if one is available in your community.
 2. Choose how long you will observe—whether it's a few minutes or longer.
 3. As vehicles pass by, observe how many people are in each vehicle. If you observe one person in the vehicle, make a mark in the *Vehicle with one person* column. If you observe more than one person in the vehicle, make a mark in the *Vehicle with more than one person* column.

Vehicle with one person	Vehicle with more than one person